

**Remarks/Arguments**

**A. Pending Claims**

Claims 4167-4183 and 4321-4342 are currently pending.

**B. The Claims Are Not Anticipated By Terry Pursuant To 35 U.S.C. § 102(b) Or, In The Alternative, The Claims Are Not Obvious Over Terry Pursuant To 35 U.S.C. § 103(a)**

The Examiner rejected claims 4167-4183 and 4321-4342 under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over U.S. Patent No. 4,099,567 to Terry (hereinafter “Terry”). Applicant respectfully disagrees with these rejections.

The Examiner states: “The Terry reference discloses a product produced from a coal formation comprising cracked gases of pyrolysis. The product appears to be the same or similar to the product claimed in that the product of Terry is produced in a similar way as compared to the claimed product. See col. 2, lines 54-68 and col. 5, lines 38-44.”

The standard for “anticipation” is one of fairly strict identity. To anticipate a claim of a patent, a single prior source must contain all the claimed essential elements. *Hybritech, Inc. v. Monoclonal Antibodies, Inc.*, 802 F.2d 1367, 231 U.S.P.Q.81, 91 (Fed.Cir. 1986); *In re Donahue*, 766 F.2d 531, 226 U.S.P.Q. 619, 621 (Fed.Cir. 1985).

Terry states: “The resulting product gas delivered to the surface via well 13 will be a composite gas composed primarily of hydrogen, carbon monoxide, cracked gases of pyrolysis, uncracked gases of pyrolysis and hydrogen sulfide.” (Terry, col. 5, lines 37-40)

Independent claim 4167 describes a mixture produced from a coal formation comprising “an average carbon number greater than about 6 and less than about 35.” Terry does not appear

to teach or suggest at least the above-quoted feature of claim 4167, in combination with the other features of the claim. Terry appears to teach away from such a product since the Terry product is described as “a composite gas composed primarily of hydrogen, carbon monoxide, cracked gases of pyrolysis, uncracked gases of pyrolysis and hydrogen sulfide.” Applicant requests removal of the anticipation rejection of claim 4167 and the claims dependent thereon.

Independent claim 4321 describes a mixture produced from a coal formation comprising “condensable hydrocarbons, wherein less than about 15 % by weight of the condensable hydrocarbons have a carbon number greater than 20; and wherein the condensable hydrocarbons comprise olefins, and wherein an olefin content of the condensable component is less than about 10 % by weight of the condensable component.” Terry does not appear to teach or suggest at least the above-quoted features of claim 4321, in combination with the other features of the claim. Terry appears to teach away from such a produce since the Terry produce is described as “a composite gas composed primarily of hydrogen, carbon monoxide, cracked gases of pyrolysis, uncracked gases of pyrolysis and hydrogen sulfide.” Applicant requests removal of the anticipation rejection of claim 4321 and the claims dependent thereon.

To reject a claim as obvious, the Examiner has the burden of establishing a *prima facie* case of obviousness. *In re Warner et al.*, 379 F.2d 1011, 154 U.S.P.Q. 173, 177-178 (C.C.P.A. 1967). To establish a *prima facie* obviousness of a claimed invention, all the claim limitations must be taught or suggested by the prior art. *In re Royka*, 490 F.2d 981, 180 U.S.P.Q. 580 (C.C.P.A. 1974); MPEP 2143.03.

The Examiner states: “In the event any difference can be shown for the product of claims 4167-4183 and 4321-4342, as opposed to the product taught by Terry, such differences would have been obvious to one of ordinary skill in the art as a routine modification of the product in the absence of a showing of unexpected results.”

“To support the conclusion that the claimed invention is directed to obvious subject matter, either the references must expressly or impliedly suggest the claimed invention or the

examiner must present a convincing line of reasoning as to why the artisan would have found the claimed invention to have been obvious in light of the teachings of the references.” *Ex parte Clapp*, 227 USPQ 972, 973 (Bd. Pat. App. & Inter. 1985). MPEP 2142. Applicant submits that the Examiner has not presented a convincing line of reasoning as to why the artisan would have found the claimed invention to have been obvious in light of the teachings of the references.

Terry describes a “process of generating medium BTU gas”. (Terry, col. 4, line 52) Terry describes a “resulting product gas” as “a composite gas composed primarily of hydrogen, carbon monoxide, cracked gases of pyrolysis, uncracked gases of pyrolysis and hydrogen sulfide.” Terry states: “The composite gas will correspond to that generated by an above ground gasifier and will mornally [*sic*] be a gas of about 480 BTU per standard cubic foot.” (Terry, col. 5, lines 37-43)

Independent claim 4167 describes a mixture produced from a coal formation comprising “an olefin content of less than about 10% by weight; and an average carbon number greater than about 6 and less than about 35.” Independent claim 4321 describes a mixture produced from a coal formation comprising “condensable hydrocarbons, wherein less than about 15 % by weight of the condensable hydrocarbons have a carbon number greater than 20; and wherein the condensable hydrocarbons comprise olefins, and wherein an olefin content of the condensable component is less than about 10 % by weight of the condensable component.”

Applicant’s Specification states:

“Condensable hydrocarbons” means the hydrocarbons that condense at 25 °C at one atmosphere absolute pressure. Condensable hydrocarbons may include a mixture of hydrocarbons having carbon numbers greater than 4. “Non-condensable hydrocarbons” means the hydrocarbons that do not condense at 25 °C and one atmosphere absolute pressure. Non-condensable hydrocarbons may include hydrocarbons having carbon numbers less than 5. (Specification, page 33, lines 19-24)

The mixtures described by claims 4167 (“an average carbon number greater than about 6 and less than about 35”) and 4321 (“condensable hydrocarbons”) are at least partially

condensable mixtures and/or partially liquid-containing mixtures. Applicant submits that Terry appears to teach or suggest only gaseous products. Applicant submits that the claimed mixtures would render the prior art invention (i.e., medium BTU gas) unsatisfactory for its intended purpose. Applicant submits, therefore, that there is no suggestion or motivation to make the proposed modification. Applicant respectfully requests removal of the obviousness rejections of claims 4167, 4321, and the claims dependent thereon.

**C. Double Patenting**

The Examiner provisionally rejected claims 4167-4183 and 4321-4342 under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 4369-4402 of copending Application No. 09/841,240. The Examiner provisionally rejected 4167-4183 and 4321-4342 under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 4429-4448 of copending Application No. 09/841,636. The Examiner provisionally rejected claims 4167-4183 and 4321-4342 under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 4188-4284 of copending Application No. 09/841,310.

Upon the present application being in condition for allowance but for the double patenting rejections, Applicant will provide arguments for the inappropriateness of the double patenting rejections and/or provide a terminal disclaimer for the patent and/or patent applications.

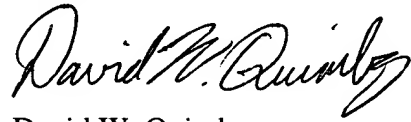
**D. Additional Comments**

Applicant submits that all claims are in condition for allowance. Favorable consideration is respectfully requested.

Applicant believes that no fees are due in association with the filing of this and accompanying documents. If an extension of time is required, Applicant hereby requests the

appropriate extension of time. If any fees are required, please charge those fees to Meyertons,  
Hood, Kivlin, Kowert & Goetzel, P.C. Deposit Account Number 50-1505/5659-07000/EBM.

Respectfully submitted,



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